

Listing and Amendments to the Claims

This listing of claims will replace the claims that were published in the PCT Application and the International Preliminary Examination Report:

1.(currently amended) A manufacturing process for a microwave corrugated-horn antenna ~~(5)~~ using waveguide technology, ~~characterized in that it consists in~~ in the process comprising the steps of:

- forming the corrugations (6) of the horn on the an external surface of a block of synthetic foam (3) by deformation of said external surface and in ~~then~~ metallizing the external surface of the conformed block of foam in order to form the antenna.

2. (currently amended) The process as claimed in claim 1, wherein the corrugations of the horn are formed by hot pressing of the block of foam in a mold (4).

3. (currently amended) The process as claimed in claim 1 ~~or 2~~, wherein the metallization of the external surface of the block of foam is carried out by a method such as projection, ~~or~~ using a brush, or ~~alternatively by dipping.~~

4. (currently amended) The process as claimed in ~~one of claims 1 to 3,~~ wherein claim 1, comprising also the step of forming by thermoforming two radial slots (8, 10) are formed in a first cylindrical section of the block of foam by thermoforming extending the horn and metallizing the surface of this said section of the block of foam is metallized in order to form a waveguide polarizer.

5. (currently amended) The process as claimed in ~~one of claims 1 to 4,~~ claim 1, comprising the step of forming by thermoforming a circular groove (12) is formed in another a second section of the block of foam by thermoforming extending the horn and metallizing the surface of this other said second section of the block of foam is metallized in order to form an impedance adapter.

6. (currently amended) A microwave corrugated-horn antenna using waveguide technology, ~~characterized in that it~~ which is formed from a block of synthetic foam having, on its external surface, corrugations obtained by deformation of said surface, said corrugations being metallized.

7. (currently amended) The antenna as claimed in claim 6, ~~characterized in that~~ wherein it comprises, in addition, a waveguide polarizer formed by two radial slots ~~(8, 10)~~ formed in a first cylindrical section of the block of foam, this first section being metallized.

8. (currently amended) The antenna as claimed in ~~either of claims 6 and 7~~ claim 6, wherein it comprises, in addition, an impedance adapter formed by a circular groove formed in a second section of the block of foam, this second section being metallized.